



## Developmental Psychology

### • Nature vs. Nurture

- Led by John Locke (1632-1704), early philosophers argued that our minds were a "tabula rasa" or blank slate
- Proponents of the nurture position continue to argue that development occurs through learning and personal experience



3

## Developmental Psychology

### • Nature vs. Nurture

- Supporters of the "Nature" position emphasize the role of maturation
  - Maturation: Sequence of genetically programmed processes of growth and development that occur over time
- Also point to the importance of critical periods in maturation
  - Critical Period: A specific time of great sensitivity to age-related learning that shapes the capacity for future cognitive developments



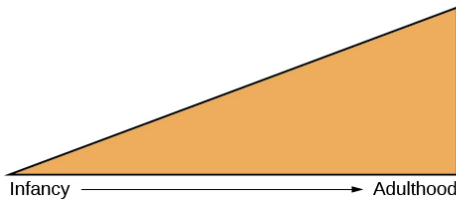
4

## Developmental Psychology

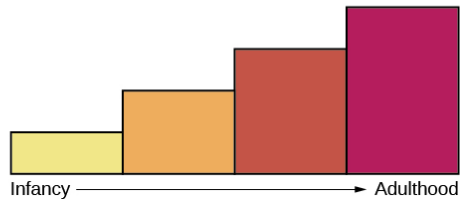
### • Continuity vs. Discontinuity

- Supporters of the "Continuity" approach argue that development is a continuous process as new abilities, skills, and knowledge are added at a gradual pace
- In contrast, supporters of the "Discontinuity" approach argue that development occurs through a series of distinct stages
  - Stage theorists pay particular attention to critical periods

Continuous Development



Discontinuous Development



5

## Developmental Psychology

### • Stability vs. Change

- Stability = Personality traits present during present during infancy endure throughout the lifespan.
- Change = Personalities are modified by interactions with family, experiences at school, and acculturation.
  - Similar to Nature vs. Nurture, but more focused on our personality traits and behavior



6

## Prenatal Development

### • The Prenatal Period

- Begins with conception and ends approximately nine months later with birth
- Stages:
  - Zygote
    - First 10 days following conception
  - Embryo
    - Cells begin to divide and differentiate into organ systems. Lasts until 8 weeks after conception
  - Fetus
    - Neural cells are produced at 250,000 per minute
    - Lasts until birth



Fetal Growth From 8 to 40 Weeks

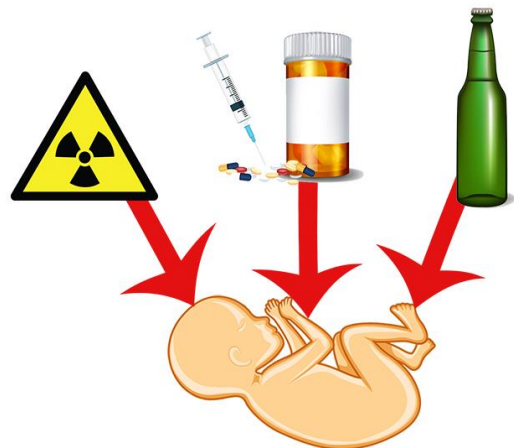


7

## Prenatal Development

### • Teratogens

- Toxic substances that can harm the fetus if ingested or contracted by the mother
- Includes:
  - Drugs
  - Alcohol
  - Nicotine
  - Viruses (HIV, AIDS, etc.)
- Example:
  - Fetal Alcohol Syndrome: Combination of birth defects, organ deformities, and mental, motor, and/or growth retardation that results from maternal alcohol use



8

## Neonatal Development

### • Neonatal/Newborn Stage

- Extends from birth to one month of age
- Sensory Abilities:
  - Can respond to sweet, salty, and bitter tastes
  - Can see close objects, such as their mothers face, but have poor distance vision
  - Are attracted to female voices and begin to recognize their mother's voice



9

## Neonatal Development

### • Reflexes

- Newborns are equipped with a variety of behavioral reflexes to help them survive
- Examples:
  - **Grasping Reflex:** Enables newborns to cling to their mother or father
  - **Postural Reflex:** Enables newborns to sit with support
  - **Rooting Reflex:** Enables newborns to turn toward the source of a touch and open their mouths



10

## Infant Development

### • Brain Development

- Infancy is characterized by rapid growth and development of the brain and nervous system
- By age 2, an infant's brain is about 75% of its adult weight and size
- People cannot remember events that occurred when they were infants because many brain circuits were not fully connected at the time

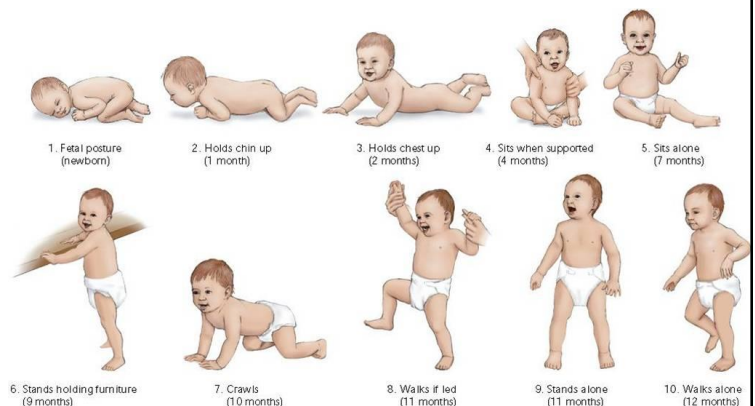


11

## Infant Development

### • Motor Development

- Typical Development:
  - 3 Months: Roll Over
  - 5-6 Months: Sit Alone
  - 11 Months: Stand Alone
  - 12 Months: Walk Alone
  - 17 Months: Walk Up Steps
- These developments provide a particularly good illustration of the maturation process



12



## Infant Development

### • Language Development

- Noam Chomsky and other linguists believe that all children have an innate ability to learn language
- "Baby Talk" encourages language development
  - Uses distinct pronunciation of simplified words such as "bye-bye" and "night-night"



13

## Infant Development

### • Language Development

- Infants in every culture follow a patterned sequence of language development
  - Cooing
  - Babbling
  - "Mama" "Dada"
- After first words, two-word sentences follow
- Linguistic skills develop rapidly
  - By age 3, a typical child has a 3,000 word vocabulary



14

## Infant Development

### • Attachment

- **Definition:** The strong bond of affection that forms between a child and a parent or other regular caregiver



### • Secure Attachment

- Forms when parents or caregivers consistently meet the infant's needs by being warm and responsive

### • Insecure Attachment

- Forms when parents or caregivers fail to fully meet the infant's needs by being neglectful and inconsistent

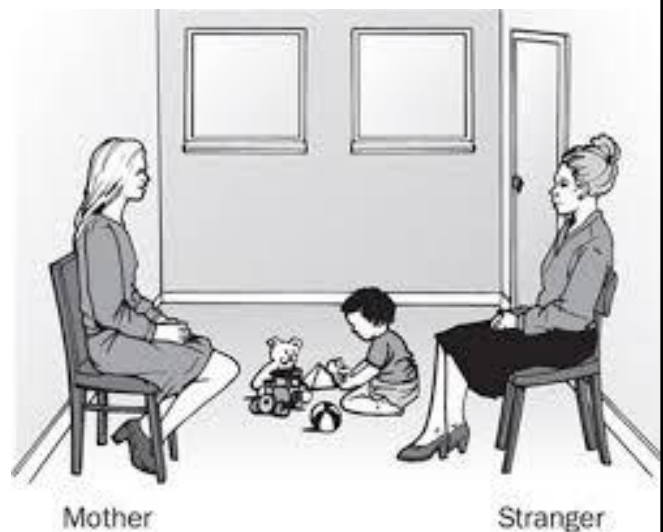


15

## Infant Development

### • Mary Ainsworth's "Strange Situation"

- Securely attached infants responded by using the mother as a "secure base" for exploring the room and displayed a positive reaction to their mother
- Insecurely attached infants were less likely to explore the room and more likely to display negative reactions to their mother



16



## Infant Development

### • Contact Comfort

- During the 1940's and 1950's developmental psychologists believed that infants formed an attachment bond with those who provided them with nourishment
- This theory ignored the role of physical contact

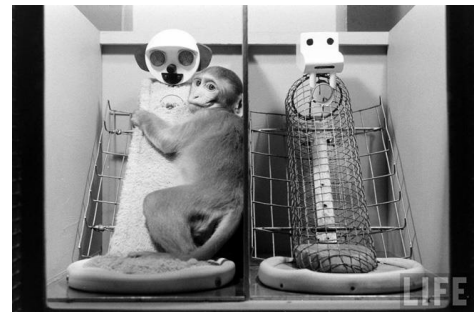


17

## Infant Development

### • Harry Harlow's Monkeys

- Cloth Mother vs. Wire Mother
- Experimental results and photographs show that in frightened situations, the infant monkeys would cling to the cloth mother
- The pattern followed in similar situations, despite the fact that the wire mother provided milk



18

## Infant Development

### • **Harry Harlow's Monkeys**

- Harlow concluded that the stimulation and reassurance derived from the physical touch of a parent or caregiver plays a key role in developing healthy physical growth and normal socialization

